

INTERNATIONAL SEARCH REPORT

PCT/IB2004/002751

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61M15/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/068029 A (OPTINOSE AS ; DJUPESLAND PER GISLE (NO)) 6 September 2002 (2002-09-06) page 7, line 5 - page 11, line 39 -----	1-12, 23-28, 30,34, 35, 56-58, 60-63
X	WO 03/020350 A (OPTINOSE AS ; DJUPESLAND PER GISLE (NO)) 13 March 2003 (2003-03-13) page 16, line 29 - page 19, line 31 ----- -/--	1-12, 23-28, 30, 32-37, 56-58, 60-63

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the International search

1 April 2005

Date of mailing of the International search report

12 -05- 2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Kroeders, M

INTERNATIONAL SEARCH REPORT

PCT/IB2004/002751

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 008 361 A (BESPAK PLC) 14 June 2000 (2000-06-14) column 7, paragraph 38 - column 8, paragraph 41 -----	1,25-27
X	WO 00/51672 A (DJUPESLAND PER GISLE) 8 September 2000 (2000-09-08) cited in the application page 17, line 16 - page 19, line 18 -----	1-12
A	US 2001/015387 A1 (FUCHS KARL-HEINZ) 23 August 2001 (2001-08-23) page 1, right-hand column, paragraph 10 -----	1,25-27
X	US 5 113 855 A (NEWHOUSE MICHAEL T) 19 May 1992 (1992-05-19) -----	56-58, 60,63
A		1,4,6,9, 11,32
A	WO 03/000329 A (INHALE THERAPEUTIC SYST ; SMEULDERS STEPHEN (US); ALSTON WILLIAM (US)) 3 January 2003 (2003-01-03) page 8, line 2 - page 9, line 31 -----	1-12
X	WO 92/21404 A (NOVONORDISK AS) 10 December 1992 (1992-12-10) page 2, line 10 - line 12 -----	63
A		1,25-27
X	FR 2 597 331 A (DENIS ALAIN) 23 October 1987 (1987-10-23) page 3, line 24 - page 4, column 4, line 18; figure 5 -----	63
A	GB 2 367 756 A (* BESPAK PLC) 17 April 2002 (2002-04-17) ----- page 1, line 17 - page 2, line 3 -----	1,12-22, 29, 39-48, 56-63

INTERNATIONAL SEARCH REPORT

PCT/IB2004/002751

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 64, 66
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy
2. ☒ Claims Nos.: 65, 66
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12, 23-28, 30-38, 56-58, 60-62, 63, 64

a breath-actuated delivery device, comprising:

A) a delivery unit

B) a loading unit,
and

C) a mouthpiece

D) an air channel

E) a flexible actuation member, actuatable on exhalation

2. claims: 39-55 and 13-22, 29, 59

a delivery device, comprising:

A) a delivery unit

B) a loading unit,
and

F) a drive member, broken upon actuation

Continuation of Box II.1

Claims Nos.: 64, 66

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by therapy

Continuation of Box II.2

Claims Nos.: 65, 66

Claims 65 and 66 attempt to define their subject-matter with reference to the drawings, contrary to Rule 6.2 PCT. As these claims do not contain any technical features, they have not been searched under Article 17(2)(a)(ii) PCT.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

PCT/IB2004/002751

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 02068029	A	06-09-2002	BR	0207560 A	14-09-2004
			CA	2438977 A1	06-09-2002
			CN	1524001 A	25-08-2004
			EP	1365827 A2	03-12-2003
			EP	1363692 A2	26-11-2003
			EP	1365826 A2	03-12-2003
			EP	1363691 A2	26-11-2003
			GB	2374537 A	23-10-2002
			GB	2374807 A	30-10-2002
			GB	2374538 A ,B	23-10-2002
			GB	2374808 A ,B	30-10-2002
			WO	02068032 A2	06-09-2002
			WO	02068029 A2	06-09-2002
			WO	02068030 A2	06-09-2002
			WO	02068031 A2	06-09-2002
			JP	2004528073 T	16-09-2004
			US	2004112378 A1	17-06-2004
			US	2004149289 A1	05-08-2004
			US	2004112379 A1	17-06-2004
			US	2004112380 A1	17-06-2004
			ZA	200306564 A	15-10-2004
WO 03020350	A	13-03-2003	GB	2381460 A ,B	07-05-2003
			GB	2395909 A ,B	09-06-2004
			WO	03020350 A1	13-03-2003
			US	2005028812 A1	10-02-2005
			BR	0210332 A	28-12-2004
			CA	2450492 A1	03-01-2003
			EP	1399203 A1	24-03-2004
			JP	2005500877 T	13-01-2005
			MX	PA03011264 A	18-03-2004
EP 1008361	A	14-06-2000	GB	2344534 A	14-06-2000
			EP	1008361 A2	14-06-2000
			US	6354290 B1	12-03-2002
WO 0051672	A	08-09-2000	AT	285810 T	15-01-2005
			AU	766410 B2	16-10-2003
			AU	2822700 A	21-09-2000
			BR	0008650 A	26-12-2001
			CA	2364009 A1	08-09-2000
			CN	1342093 A	27-03-2002
			DE	60017099 D1	03-02-2005
			EP	1161274 A1	12-12-2001
			EP	1180378 A2	20-02-2002
			GB	2349092 A ,B	25-10-2000
			WO	0051672 A1	08-09-2000
			ID	30286 A	15-11-2001
			JP	2002537908 A	12-11-2002
			MX	PA01008849 A	21-07-2003
			NO	20014182 A	01-11-2001
			NZ	514442 A	29-08-2003
			PL	350220 A1	18-11-2002
			TR	200102563 T2	22-04-2002
			US	6715485 B1	06-04-2004
			US	2004182388 A1	23-09-2004
			ZA	200107206 A	02-12-2002

INTERNATIONAL SEARCH REPORT

PCT/IB2004/002751

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2001015387	A1	23-08-2001	DE	10006369 A1	16-08-2001
			EP	1125637 A2	22-08-2001
US 5113855	A	19-05-1992	US	5201308 A	13-04-1993
WO 03000329	A	03-01-2003	EP	1399210 A2	24-03-2004
			JP	2004531334 T	14-10-2004
			TW	589201 B	01-06-2004
			WO	03000329 A2	03-01-2003
WO 9221404	A	10-12-1992	AT	126711 T	15-09-1995
			DE	69204284 D1	28-09-1995
			WO	9221404 A1	10-12-1992
			EP	0587668 A1	23-03-1994
FR 2597331	A	23-10-1987	FR	2597331 A1	23-10-1987
			AT	69153 T	15-11-1991
			DE	3774394 D1	12-12-1991
			EP	0243261 A1	28-10-1987
			EP	0266383 A1	11-05-1988
			WO	8706456 A1	05-11-1987
GB 2367756	A	17-04-2002	AU	8608201 A	22-04-2002
			CA	2415845 A1	18-04-2002
			EP	1274477 A1	15-01-2003
			WO	0230500 A1	18-04-2002
			JP	3574807 B2	06-10-2004
			JP	2004510559 T	08-04-2004
			US	6866039 B1	15-03-2005